





Plan of the talk

- 0. Preliminaries
- 1. Iranic in general
- 2. The Iranic cline: morphosyntax
- 3. The Iranic cline: phonology
- 4. The West
- 5. The East
- 6. The Northwest "East"
- 7. Conclusions



0. Preliminaries

Iranic for *Iranian*

To avoid confusion with terms related to the country or territory of Iran (especially in recent geneticist papers speaking of prehistoric "Iranian" populations almost certainly not "Iranian" in the linguistic sense)

Old Iranic

Old Avestan, datable only by relative chronology to \sim before 1000 BCE, followed by Younger Avestan, roughly 1000-500

First securely dated attesTaton of Iranic: Old Persian inscriptions since 6th century BCE (less conservative language of SW margin)

Middle Iranic languages

West: Middle Persian (SW), Parthian (NW)

"East": Alanic (N of Caucasus) + unattested steppe varieties

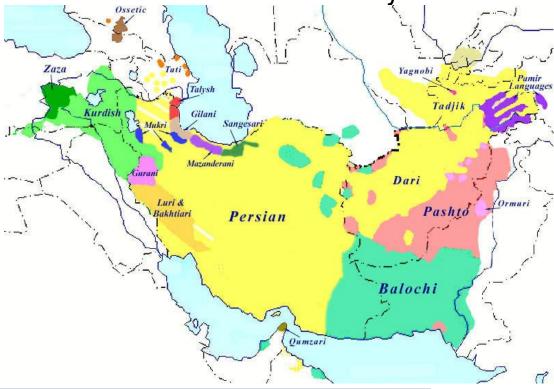
Bactrian, Khwarezmian, Sogdian

Saka: Tumšuqese, Khotanese

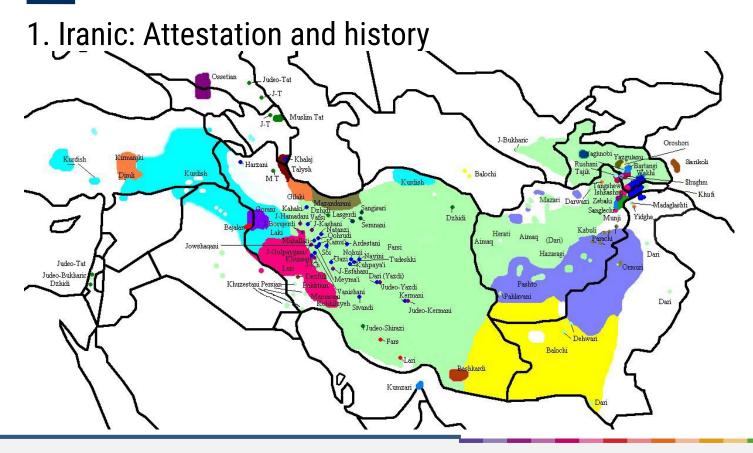


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Modern Iranic
West: SW = Persian (Farsi, Dari, Tajiki), Tat, Baxtiari, Larestani, Kumzari,
 Baškardi ...
 NW = Kurdish, Baloči, Zazaki, Gurani, Caspian (Taleshi, Gilaki ...),
 Central ...
East: Ormuri, Parači
 Ossetic; Yaynobi
 Pașto; Wanetsi
 Pamiri: Yidya-Munji; Yazyulami; Šuyni; Sariqoli
     Iškašimi(-Sangleči-Zebaki)
 Waxi
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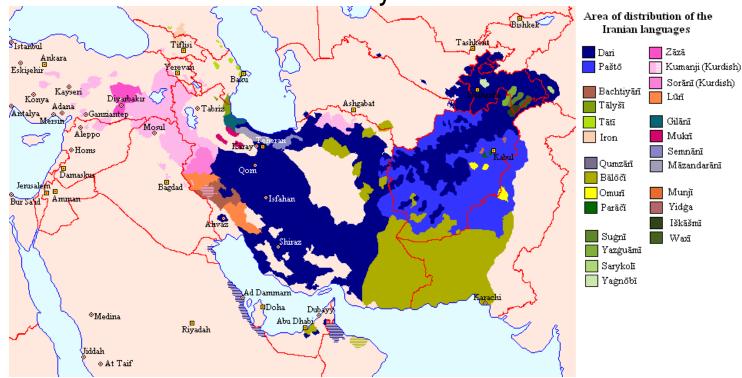


















1. Iranic: Table of languages and groups

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni+	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi+	Waxi	Burušaski
	Kurdish	Central+	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
Baxtiari	Farsi	S-Baškardi				•	



1. Iranic: Table of languages: West vs. "East"

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni+	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi+	Waxi	Burušaski
	Kurdish	Central+	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					

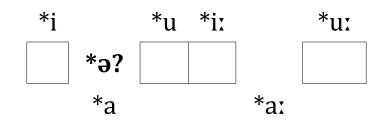


Proto-Iranic sound system

Consonants

Vowels

*h



Common (Old) Iranic sound system

Consonants

p t b~β d~δ f θ s

v r

m n

tc k

dz g~y

X

(z)

3

(c)

j

Vowels

*ə?

h

u i

(eː)

(oː)

ax

ux

a

() = only later/dialectal

1. Iranic: Internal classification

Old Iranic varieties: Phonological features

Sanskrit	Ç	dz/ĥ	¢W	dzw/hw	tw	tr	ſr	sr	s	t¢j	p
*PIIr.	tſ	dз	tʃw	јw	tw	tr	tſr	sr	S	cj	p
*PIr.	ts	dz	tsw	dzw	θw	θr	tsr	sr	S	cj	p
EN (Saka)	S	Z	l	3	θw	θr	sr	hr	h	t¢j	p
WN (Scythian)	S	Z	sp	zb	θβ	θr	sr	hr	h	t¢j	f
Avestan	S	Z	sp	zb	θβ	θr	sr	θr/hr	h	çj	p
Central (W/E)	S	Z	sp	zb	θβ	θr	sr	hr	h	çj	p
SW (Persian)	θ	d/ð	S	Z	θw	ts?	ts?	hr	h	ſj	p



1. Sound changes in Old Iranic: *ts, *tsw > $\frac{\theta}{\theta}$, s / *tsw > \int

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani	_			_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				-	



1. Sound changes in Old Iranic: * θ r > "< ς >" > $\frac{s}{s}$ / (later?) \int_{s}^{s} / $\frac{ts}{s}$

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani	-				Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



1. Sound changes in Old Iranic: *tɕj > ɕj

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



1. Sound changes in late Old Iranic: voicing after nasals (reversed)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



Old Iranic general type: inflectional, OV+AN, but mostly prepositions

More (radical) grammatical change East > West

Changes already OP vs. Avestan:

Case syncretism: instrumental = ablative

dative = genitive (cf. Benvenuto & Pompeo 2012)

Merger of all old past categories; new perfect construction > ergative

Continued in Middle Iranic:

new perfect > ergative perfective (past)



CF = case forms of nominals; PF = plural formation of nouns; G = gender VC = (inflected) verbal categories; NP = innovations in noun phrases

•	,	0		1	
	CF	PF	G	VC	NP
Avestan	8		3	13>7	
OPers	6-7		3	5/1	
Saka	6		3	5-4/2	
Sogdian	6/2	aggl.	3>2	5/2	DEM>ART
Alanic	2/4?	aggl.	-?	4/1?	REL>ART
Xwar.	3-4		2	5/1	REL>ART
Bactrian	2>1		2>0	3-4/1	REL>ART
Parthian	2>1		-	3-4/1	(EZA)
MPers	2>1		-	3-4/1	EZA



Case reduction > direct - oblique (> zero)

Middle Persian, Parthian, Bactrian with later loss likewise (presumably) in Central dialects, PO., Pamiri

Sogdian in "heavy" stems, Late Khotanese

Oblique preserved as genitive in Baloči, Baškardi (Korn 2017), generally in Kurdish, Zazaki, Caspian; Ossetic, Yaghnobi, Sariqoli, Waxi, Pastho, YM

Gender: reduction to 2 (m/f), loss



2. Morphosyntax: Loss of gender(s): 0 (2) 2 3>2

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
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Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



2. Morphosyntax: Nominal case: 8 > 6 > 4 > 2 > (2) > 0

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
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		S-Baškardi					



Agglutinative plural suffix < abstract-collective $-t\bar{a}-$: Northern (Alanic, Scythian, Sogdian) - contact with Uralic, Turkic?

Relative pronoun REL *ya*-as determinative/linker in Late Avestan, Old Persian similar to Akkadian, Aramaic

- > definite article DEF (> prefix): Western "East"
- > ezafe construction EZA: mostly (South-)West

DEF from (distal) DEM: (North-)East

2. Morphosyntax: Agglutinative plural

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian		Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



2. Morphosyntax: DEF from REL / DEM, Ezafe

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



Verbal system

New "perfect" > past from with *-ta- with ergative constructions (Jügel 2015); loss of old preterits (with "augment" prefix a-) except N

Avoided by new non-ergative constructions with transitive verbs: N with "active" participle: Khotanese with transitive auxiliary (HAVE): Alanic, Xwarezmian, Sogdian

Loss of ergativity: S (Persian) - Turkic influence? Spread (?) to Southern Pamir



(Again) new perfect construction with *-ta-ka- + copula

+ frequent evidential function under Turkic influence?

"Potential" constructions with *kar- MAKE/ *baw- BECOME

+ participle/infinitive: Saka, Waxi, Sogdian, Xwarezmian, Munji

Future with *kām* (< 'wish'): Sogdian, Xwarezmian



2. Morphosyntax: Loss of old finite preterit (with *a-)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo- Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



2. Morphosyntax: ergativity: preserved / avoided / lost

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



2. Morphosyntax: new perfect with *-taka- (+evidential)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				-	



3. The Iranic Cline: Morphosyntax and Phonology

Connection of more radical grammatical change to (word) boundarysensitive vs. -insensitive changes (Kümmel 2013)

Explanation: communication highlighting lexemes rather than grammatical items = strong language contact, many L2 speakers

Western Iranic: prestige languages of empires with many diverse languages

Eastern Iranic: less contact to non-Iranic

Sogdian = Silk Road "lingua franca", but actually spoken?

Saka: marginal, much outer contact = L2 speakers?



3. The Iranic Cline: Phonology

Pre- and Common Middle Iranic

Internal (allophonic) b, d, $g > \beta$, δ , γ already YAv. OPers.

mp, nt, nk > mb, nd, ng (except Baloči) already late OPers.

often merger with old *mb, nd, ng*

but preceded by mb, nd > mm in MP, mb > m in Saka

Stage reflected by bulk of loanwords into Armenian + Pahlavi spelling



3. The Iranic Cline: Phonology

Western Iranic except Baloči (NW), S-Baškardi (SW, cf. Korn 2017)

Boundary-sensitive changes

Internal lenition: $-\beta$, $-\delta$, $-\gamma > w$, j, w/j (late in Parthian)

$$-p$$
, $-t$, $-k > b$, d , g

later (new) -b, -d, -g > β/v , δ , γ

Kurdish -f, -s, -f > v, z, z

Partial initial fortition: MP $w - g^w$, j - dz

Kurdish also f-, θ -, x- > p^h , t^h , k^h

Loss of final syllables



3. The Iranic Cline: Phonology

Eastern(most) exception: Saka, esp. Khotanese; Ormuri-Parači

Boundary-sensitive changes

Internal lenition: Kh. - β , - δ , - γ > w, \emptyset , \emptyset

Kh.
$$-p$$
, $-t$, $-k > b$, d , $g > \beta$, \eth , $\gamma > w$, $\eth > \emptyset$, $\gamma > \emptyset$
 $-f$, $-\theta$, $-x > h$

Initial fortition: w - > Kh. g/b; O-P. $*\gamma^w$; y - > j > Kh. dz; O-P. *dz

$$\beta$$
, δ , $\gamma > b$, d , g (if not preserved)

$$f, \theta, x > \text{Kh. Par. } p^h, t^h, k^h$$

Late loss of final syllables



3. Sounds: Lenition of *b*, *d*, *g* only internal (by reversal?)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: loss of final syllables (complete / partial)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: initial fortition of glides

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: initial fortition of voiceless fricatives

(except if only $\theta > t$)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. The Iranic Cline: Phonology

Eastern Iranic (except Ormuri-Parači? Reversal in Saka):

Boundary-insensitive changes

General/initial lenition:

```
ft, xt > vd, yd

b, d, g > \beta/v, \delta, y except after (homorganic) nasals

= extension of older internal lenition to initial position

exception: Alanic-Ossetic b-
general loss of h
```

No general loss of final syllables (less and less from west to east)



3. Sound changes: Lenition of *ft, xt*

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				-	



3. Sound changes: Lenition of initial d, g (reversed?)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	<u> </u>
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: Lenition of initial *b* (reversed?)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: Loss of *h*-

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: Initial *dz- > z

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani	-				Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. The Iranic Cline: Phonology

Later internal lenition (voicing) of voiceless obstruents: widespread in both West and East

p, t except Sogdian-Yaynobi, Waxi

tf/ts > dg/dz except Sogdian-Yaynobi, Iškašimi?, Waxi, Parači

k except Sogdian-Yaynobi, Iškašimi, Waxi, Parači-Ormuri

 $\int /s > 3/z$ only Kurdish; Pashto, YM, Pamiri, Saka (but not Waxi)

f > v; s > z only (partly) Kurdish



3. Sound changes: Internal lenition p, t > b, d (> ...)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	L
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: Internal lenition k > g (> ...)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: Internal lenition t / ts > d / dz (> ...)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: Internal lenition $\int /\xi > 3/\chi (> ...)$

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: internal *- θ - > h

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: initial $*\theta$ - > h

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. The Iranic Cline: Phonology

Other areal features of or within Eastern Iranic

*sr > s/J, cf. NW Indo-Aryan

Depalatalization of affricates t > t > t < t > t < t > t

Velarization of $\frac{1}{5}$ / $\frac{1}{5}$ > $\frac{1}{5}$ / $\frac{1}{5}$ etc.

Introduction of retroflex stops: Indo-Aryan neighbourhood

Postalveolar contrast in sibilants / affricates: Hindukush area

"Lambdacism" $*\delta > l$ (vs. more widespread $*r\delta > l$): cf. Nuristanic Vasivari, NW Indo-Aryan (for original lenited *t)



3. Sound changes: *sr > $\S/$

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: t∫ > ts

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: dz- > dz-

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: * \dot{s} , \dot{z} > \dot{c} /x, \dot{j} / $\dot{\gamma}$

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound patterns: retroflex stops

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound patterns: more than two sibilant places

 $(\approx retroflex sibilants)$

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound patterns: more than one or two affricate places

(≈ retroflex affricates)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: $*\delta > 1$

(not in Sogdian, cf. Lurje & Yakubovich 2017)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	ı
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: $*r\delta > I$, \land

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. The Iranic Cline: Phonology

Contrastive stop aspiration: N Kurdish/Zazaki; Saka, Parači cf. neighbouring Indo-Aryan and Caucasus

Pharyngeals and pharyngealized sounds (except in loans): Zazaki, Gurani, Kurdish

cf. Arabic and Aramaic

Uvular stops: widespread in Arabic elements and other loans rarer in inherited material ($\kappa > \epsilon$ change): Ossetic, Persian, S-Tat

Contrast of [r/a] vs. "long" [r]: Kurdish, Zazaki, Gurani; Saka; cf. Armenian Retroflex r: Baloči, Pashto, Yidya-Munji, Parači; cf. Indo-Aryan



3. Sound patterns: aspiration contrast in stops (ejectives)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound patterns: pharyngeals/pharyngealization

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound patterns: uvular stops (borrowed / native)

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound patterns: contrasting rhotics: r / r or r / r

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani	-				Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. The Iranic Cline: Phonology

Vowel developments

Fronting of low short vowel /a/> æ, ε Western

Retraction/rounding of low vowels: /a:/ > p:,p:,o: widespread (E>W)

/a/ > e,ɔ,o,u Eastern

Centralization of high vowels: mostly Eastern

Stronger use of umlaut in grammar: Eastern

(Raising of long mid vowels)

(Fronting of high back vowel)



3. Sound changes: Fronting vs. backing of a

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi					



3. Sound changes: Backing/rounding of \bar{a}

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				-	



3. Sound changes: Centralization of *i

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: Umlaut in grammar weak > strong

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami	Tocharian	Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	l
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: Raising of ē

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami		Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: Raising of ō

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami		Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani				_	Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



3. Sound changes: Fronting of ū

Alanic	-Ossetic	(Scythian)	Sogdian	Yaynobi	Yazyulami		Tumšuq
	Caspian	Xwarezmian	Avestan	Tajiki	Šuyni	Sariqoli	Khotan
Zazaki		Parthian	Bactrian	Dari	Iškašimi	Waxi	Burušaski
	Kurdish	Central	Pashto		Munji	Yidya	Nuristani
Gurani					Parači	Indo-Aryan	
Tat	Persian	Baloči		Wanetsi	Ormuri		
		S-Baškardi				•	



4. The West

Areal connections

Elamite

E Semitic (Akkadian)

NW Semitic (Aramaic)

Hurrian-Urartian

Old Armenian

Georgian

Later: Arabic

Turkic (Oghuz)



4. The West

Areal trends

Prefinal accent + loss of final syllables > final accent also in NW Semitic, late Akkadian, Armenian

Spread of pharyngeals and pharyngealization from Semitic: Kurdish, Zazaki

Ergative alignment or indexing/flagging also in Armenian (only perfect, lost); Neo-Aramaic

Loss of ergativity

Persian and other varieties, influenced by Arabic and Turkic?



4. The West

Reduction of inflection

Loss of gender: except in Zazaki, Kurdish

Loss of case: except in Zazaki, Kurdish, Baloči; Armenian

Attributive linker construction (*ezafe*): Persian+, Kurdish (infl.), Zazaki (infl.); traces in NW EIr.

Indefinitive (specific) suffix/article: Persian, Zazaki, Kurdish

Definite suffix/article: Sorani, Southern Kurdish



5. The East

Areal connections

Tocharian (IE but highly different)

NW Middle Indo-Aryan (IIr., only in SE)

Old and later SW/SE Turkic

Tibetan, Old Chinese

Areal trends: phonology

Centralization of high vowels (also in Tocharian)

Stronger umlaut (also in Tocharian, but rather different in details)

Backing of low vowels (also Nuristanic)



5. The East

Areal trends

Late and partial loss of noun inflection:

Bactrian; less in Xwarezmian; phonologically conditioned in Sogdian

Article from relative: W = Bactrian, Khwarezmian adjacent to NW (Alanic)

Article from (distal) demonstrative: Sogdian, Pamiri

Agglutinative plural (suffix *-tā-): Sogdian, cf. NW (Scythian-Alanic) influence of Uralic / Turkic



6. The Northwest "East"

= Alanic - Ossetic

Areal connections

NW and NE Caucasian

(Later:) South Caucasian

Slavic

East Germanic

Areal trends

Development of ejectives aspirated voiceless stops vs. unaspirated geminates



6. The Northwest "East"

Morphosyntactic developments

= Eastern: agglutinative number/case marking DEF (prefix) from relative

(Not many) additional local cases with distinction of inessive vs. adessive

Development of directional prefixes

Well-preserved verbal system but loss/avoidance of ergative tendencies

7. Concluding remarks: potential (micro) areals

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West: Difference of S (Persian) vs. N decreases
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"East" to be split:

Caucasian areal = NW

Northern areal = NW + Sogdian (+ Xwarezmian)

Tarim "areal" = Saka

Pamir areal

Hindukush areal

Southern areal = South Asian influence

Transitional phenomena

mutually overlapping



Thank you for your attention!

Tänan teid tähelepanu eest!